



NATIONAL OCEAN SERVICE

**OCS, Marine Chart Division
1315 East-West Highway
Silver Spring, MD 20910**

December 17, 2008

FAX COVER SHEET

Page 1 of 10

TO: *Rob Jones*

FROM: *Lyn Preston, NOS, NOAA*

COMPANY: *NTSB*

PHONE:

PHONE:

FAX: *(301) 713-4516*

Mr Jones

Re: USCP (SF Oakland Bay Bridge)

Subject: Re: USCP (SF Oakland Bay Bridge)
From: "Lyn.Preston" <Lyn.Preston@noaa.gov>
Date: Wed, 12 Nov 2008 17:08:47 -0500
To: Jones Rob <rob.jones@ntsb.gov>

Mr. Jones:

The Navigation Services Division's Coast Pilot Branch completed the cartographic research into your question regarding the origination of the narrative text describing the passage through the San Francisco-Oakland Bay Bridge) found in paragraph 175 of Coast Pilot 7 (40th Edition).

It was determined that this information was placed into the Coast Pilot 7 volume sometime between 1963 and 1972 (between the ninth and tenth editions of CP7). It should be noted that the tenth edition of CP7 is the 1968 edition, however, the inside cover of CPB's file copy shows a reprint date of 1972. The exact wording for the paragraph in the tenth edition can be seen on the attachment CP7-1968.pdf.

After examining microfilm rolls 57, 60, 65, 72, and 96, (records from 1956 to 1975) and all supplements to Coast Pilot 7, the researcher was unable to determine what the source of the entry was. The only record of the entry was found in source material on roll 96 which noted the latest edition of chart 5532 and the San Francisco Vessel Traffic System as the source. (See CP7-Roll96-source.pdf)

The original wording found in the ninth edition is in the attachment CP7-1963.pdf.

I have attached all the researcher's findings (pdf files) to this email for your reference.

Regards,

Lyn Preston
(Acting) Deputy, Marine Chart Division

Jones Rob wrote:

Lyn,

Any results yet.

Thanks Rob

-----Original Message-----

CP7-1963.pdf	Content-Type: application/x-msdownload
	Content-Encoding: base64

CP7-1968.pdf	Content-Type: application/x-msdownload
	Content-Encoding: base64

CP7-Roll96-source.pdf	Content-Type: application/x-msdownload
	Content-Encoding: base64

around the island have lights and fog signals. A shoal covered by 15 feet, off the northerly end of the island, is marked by a buoy.

When the prevailing westerly winds are blowing, deep-draft vessels proceeding to the berthing area on the eastern side of the island may have extreme difficulty making the 90° turn from the narrow channel between the 30-foot curves southeastward of Yerba Buena Island.

A measured course, on the west side of Treasure Island, is 0.102 feet long on bearing 330°44' and marked by white poles with small white targets. The southern range is on the northwestern extremity of Yerba Buena Island and the northern range is near the northwestern end of Treasure Island.

Naval restricted areas are off the north end of Treasure Island and between this island and Yerba Buena Island; limits and regulations are given in 207.640, Chapter 2.

San Francisco-Oakland Bridge crosses the bay from Rincon Point in San Francisco to Yerba Buena Island, thence to Oakland. The clearance between piers B and C is 217 feet.

Prominent features.—The skyline of the city of San Francisco is, of course, historically unmistakable, with several dominant landmarks: the old Ferry Building at the foot of Market Street, the tower and outside elevator shaft of the Fairmont Hotel, the "Top of the Mark" Hopkins Hotel, the Gilt Tower on Telegraph Hill, and the Bay Bridges with their freeway elevated approaches.

The Ferry Building, once the terminal of many ferryboats, now houses the Port of San Francisco and its San Francisco Port Authority offices, the offices of the Marine Exchange, Inc., and the many offices and exhibits of the World Trade Center. Located as it is in the center part of the Embarcadero, the Ferry Building with its 240-foot clock tower, illuminated at night, remains an outstanding landmark on the San Francisco side of the harbor.

Channels.—Depths of 45 feet or more are available from the Golden Gate Bridge to most of the anchorages; depths ranging from 29 to 40 feet can be taken to most of the San Francisco piers.

Anchorage.—General, naval, and explosives anchorage areas have been established in San Francisco Bay; limits and regulations are given in 202.224, Chapter 2. The western part of Anchorage 7, westward of Treasure Island, is used by vessels undergoing examination by quarantine, customs, and immigration officials.

Dangers.—Anita Rock, 1.1 miles eastward of Fort Point and 300 yards from shore, uncovers; it is marked by buoys.

There are several rocky patches with depths of 33 to 35 feet westward and northwestward of Alcatraz Island that must be avoided by deep-draft vessels.

Heavy tide rips occur in the vicinity of Alcatraz Island.

Tides.—The mean range of tide at San Francisco is 4 feet. The range between mean lower low water and mean higher high water is 3.7 feet. A range of about 9 feet may occur at the time of maximum tides. Daily tide predictions for San Francisco Bay are given in the Tide Tables.

Currents.—Inside the Golden Gate the flood current sets into all parts of the bay and causes swirls from the Golden Gate as far eastward as Alcatraz and Angel Islands and through Racepoint Strait, northward of Angel Island. The ebb current, inside the Golden Gate, is felt first along the southern shore. In the Golden Gate, the average duration of the ebb stream is somewhat greater than that of the flood. In the Sacramento and San Joaquin Rivers there is a weak flood current during periods of freshets.

At the San Francisco-Oakland Bridge there are large current eddies near the foundation piers which cause ships to sheer off course.

The flow of tidal currents throughout San Francisco Bay is clearly depicted on the Tidal Current Charts, San Francisco Bay. The charts, which may be used for any year, are referred to the times of the maximum flood and ebb currents at San Francisco Bay entrance (Golden Gate). Daily predictions are given in the Tidal Current tables.

See Appendix for storm warning displays.

Towage.—Tugboats are available in sufficient quantity for the traffic in the greater harbor.

Quarantine service is performed on a 24-hour basis, the off-hours by special arrangement in advance. Quarantine is enforced in accordance with the regulations of the U.S. Public Health Service. There is a Public Health Service Hospital in the city.

Customs.—San Francisco is the headquarters of the customs collection district and a port of entry; marine documents are issued.

Immigration officials are stationed at San Francisco.

Harbor regulations.—The Port of San Francisco is under the control of the State of California, and its management is vested in the San Francisco Port Authority, in direct charge of the port director of that body. The office of the Chief Wharftinger is on the Embarcadero at the foot of Pier 1.

The harbor regulations are prescribed by the San Francisco Port Authority and enforced by the Chief Wharftinger.

Wharves.—The Port of San Francisco maintains extensive terminals with belt-line connections and modern cargo-handling facilities. Depths of 20 to more than 30 feet are alongside most of the piers. A complete description of wharves and piers at San Francisco may be obtained from the Port Series, a Corps of Engineers publication.

Supplies.—Fuel oil, gasoline, marine hardware, and groceries may be had in any desired quantity. Fuel oil is usually delivered by barge. Water can be obtained on the wharves or by waterboat.

Repairs.—San Francisco, Oakland, and Alameda have facilities for making repairs to vessels and machinery of all kinds and sizes. The largest commercial floating drydock in San Francisco has a length of 584 feet at the keel blocks, clear width of 100 feet, depth of 28 feet over the blocks, and lifting capacity of 22,000 tons. There are several smaller drydocks on the San Francisco side, and

marked by lighted bell buoys. Vessels are cautioned not to foul the submarine cables that extend southward from the range to the observation house on the Marina seawall.

Alcatraz Island, 2.5 miles eastward of the Golden Gate Bridge, is one of the leading marks in entering San Francisco Bay. The small island is 148 feet high and has many buildings on it. Alcatraz Light (37°49.6' N., 122°25.3' W.), 214 feet above the water, is shown from a gray, octagonal pyramidal tower on the southeast part of the island. Fog signals are on the extreme northwestern and southeastern ends of the island. A submarine operating area is northward of Alcatraz Island; see 207.640(a), Chapter 2.

A rock awash, marked on its westerly side by a bell buoy, is 125 yards westward of the northwestern end of Alcatraz Island.

Dumping grounds have been established south of Alcatraz Island; see 205.60 (a)(1), and (b), Chapter 2, for limits and regulations.

Yerba Buena Island, 345 feet high and 2.5 miles southward of Alcatraz Island, is of small extent, irregular in shape, and is covered with a scrubby growth of trees. On its summit is a former lookout tower, now a Navy Officers Club. The piers and wharves in the small cove on the eastern side of the island are part of a Coast Guard Base.

Yerba Buena Light (37°48.4' N., 122°21.7' W.), 95 feet above the water, is shown from a white octagonal tower at the extreme southeastern point of the island. A fog signal is at the light, and the tower is floodlighted at night. The buildings at the station are white with red roofs.

Dumping grounds have been established west of Yerba Buena Island; see 205.60(a)(2), and (b), Chapter 2, for limits and regulations.

Treasure Island is a low filled area northward of and connected by a causeway to Yerba Buena Island. Built originally for the San Francisco International Exposition of 1939-40, it is now a U.S. Naval Station. Some of the piers around the island have lights and fog signals. A shoal covered 15 feet, off the northerly end of the island, is marked by a buoy.

When the prevailing westerly winds are blowing, deep-draft vessels proceeding to the berthing area on the eastern side of the island may have extreme difficulty making the 90° turn from the narrow channel between the 20-foot curves southeastward of Yerba Buena Island.

A 150°43'-330°43' measured nautical mile has been established off the west side of Treasure Island. The markers are white poles with small white targets. The southern range is on the northwestern extremity of Yerba Buena Island and the northern range is near the northwestern end of Treasure Island.

Naval restricted areas are off the north end of Treasure Island and between this island and Yerba Buena Island; limits and regulations are given in 207.640(h) and (i), Chapter 2.

San Francisco-Oakland Bay Bridge, said to be the longest bridge in the world, crosses the bay from Rincon Point in San Francisco to Yerba Buena Island, thence to Oak-

land. The recommended passage is under the northeastern half of span A-B (midspan clearance 204 feet) or under the southwestern half of span D-E (midspan clearance 204 feet). The midspan clearance of spans B-C and C-D are each 220 feet. These clearances are approximate; they may be reduced by several feet due to heavy traffic on the bridge and prolonged periods of extremely-high temperature, and as much as 10 feet under extreme conditions.

The Port of San Francisco, the largest port on the bay, is the oldest and one of the most important on the Pacific coast. Though primarily a general cargo port, grain, bulk liquids, containers, newsprint, automobiles, bananas, copra, cotton, and other commodities are handled here. San Francisco is the home port of passenger liners of several U.S. companies in the trans-pacific service, and is a popular port of call for other passenger vessels of regular scheduled and special cruises.

Prominent features.—The skyline of the city of San Francisco is unmistakable, with several dominant landmarks: the old Ferry Building at the foot of Market Street; the tower and outside elevator shaft of the Fairmont Hotel; the "Top of the Mark" Hopkins Hotel; the Coit Tower on Telegraph Hill, and the Bay Bridges with their freeway elevated approaches.

The Ferry Building, once the terminal of many ferry boats, now houses the San Francisco Port Authority offices, the offices of the Marine Exchange, Inc., and the many offices and exhibits of the World Trade Center. Located as it is in the center part of the Embarcadero, the Ferry Building with its 240-foot clock tower, illuminated at night, remains an outstanding landmark on the San Francisco side of the harbor.

Channels.—Depths of 35 feet or more are available from the Golden Gate Bridge to most of the anchorages; depths ranging from 20 to 40 feet can be taken to most of the San Francisco piers.

Anchorage.—General, Naval, and explosive anchorage areas have been established in San Francisco Bay; limits and regulations are given in 110.224(a) and (p), Chapter 2. The western part of Anchorage 7, westward of Treasure Island, is used by vessels undergoing examination by quarantine, customs, and immigration officials.

Dangers.—Amin Rock, 1.1 miles eastward of Fort Point and 300 yards from shore, is covered 3 feet and marked by a light.

There are several rocky patches with depths of 33 to 35 feet westward and northwestward of Alcatraz Island that must be avoided by deep-draft vessels. The northwesternmost of these shoals is Harding Rock, marked by a lighted buoy.

The Trans-Bay Tube of the Bay Area Rapid Transit System is under construction between San Francisco in the vicinity of the Ferry Tower, and the Oakland Mole. Mariners should exercise caution in navigating in this area since various floating construction equipment might exist at the site.

Heavy tide rips occur in the vicinity of Alcatraz Island.

Tides.—The mean range of tide at San Francisco is 4 feet. The range between mean lower low water and mean higher high water is 5.7 feet. A range of about 6

Page 14

7/22/73

Lines 50-53/L: read:

S range is on the NW extremity of Yerba Buena Island and is marked by white poles with small red targets. The N range is near the NW end of Treasure Island and is marked by white poles with small white targets. (Visual Observations, 7/19/73)

Page 154

7/22/73

Lines 1-3/R: read:

land. The recommended passage for southbound traffic is under the NE half of span A-B (mid span clearance 204 feet). Northbound traffic should use the SW half of span D-E (mid span clearance ... (See latest edition of chart 5532 and San Francisco Vessel Traffic System, ref. no. 0035.)

Re: USCP (SF Oakland Bay Bridge)

Subject: Re: USCP (SF Oakland Bay Bridge)
From: "Lyn.Preston" <Lyn.Preston@noaa.gov>
Date: Thu, 20 Nov 2008 08:42:16 -0500
To: Jones Rob <rob.jones@ntsb.gov>
CC: "Thomas.Loeper" <Thomas.Loeper@noaa.gov>

Mr. Jones:

Please see my email response November 12, 2008. Shall I re-send?

Jones Rob wrote:

Any word on the information I requested.
Thanks Rob

Subject: [Fwd: Re: USCP (SF Oakland Bay Bridge)]
From: "Lyn.Preston" <Lyn.Preston@noaa.gov>
Date: Thu, 20 Nov 2008 09:52:13 -0500
To: Jones Rob <rob.jones@ntsb.gov>

Mr. Jones:

Per your request.

----- Original Message -----

Subject: Re: USCP (SF Oakland Bay Bridge)
Date: Wed, 12 Nov 2008 17:08:47 -0500
From: Lyn.Preston <Lyn.Preston@noaa.gov>
To: Jones Rob <rob.jones@ntsb.gov>
References: <EE86DD4E76D616408A17AA34953DFDA76B15DA@hqexcntsb01.ntsb.int>

Mr. Jones:

The Navigation Services Division's Coast Pilot Branch completed the cartographic research into your question regarding the origination of the narrative text describing the passage through the San Francisco-Oakland Bay Bridge found in paragraph 175 of Coast Pilot 7 (40th Edition). It was determined that this information was placed into the Coast Pilot 7 volume sometime between 1963 and 1972 (between the ninth and tenth editions of CP7). It should be noted that the tenth edition of CP7 is the 1968 edition, however, the inside cover of CPB's file copy shows a reprint date of 1972. The exact wording for the paragraph in the tenth edition can be seen on the attachment CP7-1968.pdf.

After examining microfilm rolls 57, 60, 65, 72, and 96, (records from 1958 to 1975) and all supplements to Coast Pilot 7, the researcher was unable to determine what the source of the entry was. The only record of the entry was found in source material on roll 96 which noted the latest edition of chart 5532 and the San Francisco Vessel Traffic System as the source. (See CP7-Roll96-source.pdf)

The original wording found in the ninth edition is in the attachment CP7-1963.pdf.

I have attached all the researcher's findings (pdf files) to this email for your reference.

Regards,

Lyn Preston
(Acting) Deputy, Marine Chart Division

Jones Rob wrote:

Lyn,

Any results yet.

Thanks Rob

-----Original Message-----

CP7-1963.pdf

Content-Type: application/x-msdownload
Content-Encoding: base64

CP7-1968.pdf	Content-Type: application/x-msdownload Content-Encoding: base64
---------------------	--

CP7-Roll96-source.pdf	Content-Type: application/x-msdownload Content-Encoding: base64
------------------------------	--

Re: USCP (SF Oakland Bay Bridge)

Subject: Re: USCP (SF Oakland Bay Bridge)
From: <Lyn.Preston@noaa.gov>
Date: Tue, 16 Dec 2008 08:43:33 -0500
To: Jones Rob <rob.jones@ntsb.gov>
CC: "Thomas.Loeper" <Thomas.Loeper@noaa.gov>

Rob~

I have sent you the NOAA response on many occasions. I am unsure why they are not making it to your email's INBOX? Are you operating under a firewall?

Unfortunately, I am away from the office attending a commencement in Florida at this time. I will return on Wednesday, December 18th. The materials are at my workstation. I will be glad to send the response once again, but am not confident at this point of your receiving them.

Please let me know if you receive this.

Lyn

----- Original Message -----

From: Jones Rob <rob.jones@ntsb.gov>
Date: Monday, December 15, 2008 1:08 pm
Subject: USCP (SF Oakland Bay Bridge)
To: "Lyn.Preston" <Lyn.Preston@noaa.gov>
Cc: "Thomas.Loeper" <Thomas.Loeper@noaa.gov>

Lynn,

Happy Holidays,

Still have not rcvd anything from you regarding my request. I was wondering as to the status of it.

Regards
Rob Jones